## § 236.1006

EFFECTIVE DATE NOTE: At 79 FR. 49716. Aug. 22. 2014. §236.1005 was amended by revising the header row in the table in paragraph (a)(1)(i), the heading of paragraph (b)(4)(iii). and revise paragraphs (b)(4)(iii)(A) through (C), effective Oct. 21, 2014. For the convenience of the user, the revised text is set forth as follows:

## §236.1005 Requirements for Positive Train Control systems.

- (a) \* \* \*
- (1) \* \* \*
- (i) \* \* \*

| Crossing type |  | Max. speed |  | Protection<br>required |  |
|---------------|--|------------|--|------------------------|--|
| _             |  |            |  |                        |  |

- (b) \* \* \* (4) \* \* \*
- (iii) Freight lines with de minimis risk not used for regularly provided intercity or commuter rail passenger service. (A) In a PTCIP or an RFA, a railroad may request review of the requirement to install a PTC system on a track segment where a PTC system is otherwise required by this section, but has not yet been installed, based upon the presence of a minimal quantity of PIH materials traffic. Any such request shall be accompanied by estimated traffic projections for the next 5 years (e.g., as a result of planned rerouting, coordination, or location of new business on the line). Where the request involves prior or planned rerouting of PIH materials traffic, the railroad must provide the information and analysis identified in paragraph (b)(4)(i) of this section. The submission shall also include a full description of potential safety hazards on the segment of track and fully describe train operations over the line. This paragraph does not apply to line segments used for commuter rail or intercity rail passenger service.
- (B) Absent special circumstances related to specific hazards presented by operations on the line segment, FRA will approve a request for relief under this paragraph for a rail line segment that meets all of the following criteria:
- (1) That carries less than 15 million gross tons annually:
- (2) That does not have a heavy grade as "heavy grade" is defined in §232.407 of this chapter for any train operating over the track segment:
- (3) Where the railroad adopts and complies with an operating rule requiring the crew of any train approaching working limits established under part 214 of this chapter to notify the roadway worker in charge of the train's approach at least 2 miles in advance of the working limits or, if the train crew does not have advance knowledge of the working limits, as soon as practical:

- (4) That carries fewer than 100 cars containing PIH materials per year, excluding those cars containing only a residue, as defined in §171.8 of this title, of PIH materials;
- (5) That carries 2 or fewer trains per day carrying any quantity of PIH materials;
- (6) Where trains carrying any quantity of PIH materials operate at speeds not to exceed 40 miles per hour; and
- (7) Where any train transporting a car containing any quantity of PIH materials is operated with a vacant block ahead of and behind the train.
- (C) FRA may, in its discretion, approve other track segments not used for regularly provided intercity or commuter passenger service that have posed an equivalent or lesser level of risk of a PTC-preventable accident or PIH materials release as those track segments covered by paragraph (b)(4)(iii)(B) of this section, where such other track segments are similar to those covered by paragraph (b)(4)(iii)(B) of this section.

# § 236.1006 Equipping locomotives operating in PTC territory.

(a) Except as provided in paragraph (b) of this section, each train operating on any track segment equipped with a PTC system shall be controlled by a locomotive equipped with an onboard PTC apparatus that is fully operative and functioning in accordance with the applicable PTCSP approved under this

(b) Exceptions. (1) Prior to December 31, 2015, each railroad required to install PTC shall include in its PTCIP specific goals for progressive implementation of onboard systems and deployment of PTC-equipped locomotives such that the safety benefits of PTC are achieved through incremental growth in the percentage of controlling locomotives operating on PTC lines that are equipped with operative PTC onboard equipment. The PTCIP shall include a brief but sufficient explanation of how those goals will be achieved, including assignment of responsibilities within the organization. The goals shall be expressed as the percentage of trains operating on PTCequipped lines that are equipped with operative onboard PTC apparatus responsive to the wayside, expressed as an annualized (calendar year) percentage for the railroad as a whole.

(2) Each railroad shall adhere to its PTCIP and shall report, on April 16, of 2011, 2012, 2013, and 2014, its progress toward achieving the goals set under paragraph (b)(1) of this section. In the event any annual goal is not achieved, the railroad shall further report the ac-

tions it is taking to ensure achievement of subsequent annual goals. (3) On and after December 31, 2015, a train controlled by a locomotive with an onboard PTC apparatus that has

failed en route is permitted to operate in accordance with §236.1029.

- (4) A train operated by a Class II or Class III railroad, including a tourist or excursion railroad, and controlled by a locomotive not equipped with an onboard PTC apparatus is permitted to operate on a PTC-operated track segment:
  - (i) That either:
- (A) Has no regularly scheduled intercity or commuter passenger rail traffic; or
- (B) Has regularly scheduled intercity or commuter passenger rail traffic and the applicable PTCIP permits the operation of a train operated by a Class II or III railroad and controlled by a locomotive not equipped with an onboard PTC apparatus;
- (ii) Where operations are restricted to four or less such unequipped trains per day, whereas a train conducting a "turn" operation (e.g., moving to a point of interchange to drop off or pick up cars and returning to the track owned by a Class II or III railroad) is considered two trains for this purpose; and
- (iii) Where each movement shall either:
  - (A) Not exceed 20 miles in length; or
- (B) To the extent any movement exceeds 20 miles in length, such movement is not permitted without the controlling locomotive being equipped with an onboard PTC system after December 31, 2020, and each applicable Class II or III railroad shall report to FRA its progress in equipping each necessary locomotive with an onboard PTC apparatus to facilitate continuation of the movement. The progress reports shall be filed not later than December 31, 2017 and, if all necessary locomotives are not yet equipped, on December 31, 2019.
- (c) When a train movement is conducted under the exceptions described

in paragraph (b)(4) of this section, that movement shall be made in accordance with §236.1029.

§ 236.1006

EFFECTIVE DATE NOTE: At 79 FR 49716. Aug. 22, 2014, §236,1006 was amended by revising paragraph (a), removing paragraph (b)(2), and adding paragraphs (b)(5) and (d), effective Oct. 21. 2014. For the convenience of the user, the added and revised text is set forth as fol-

#### 8 236 1006 Equipping locomotives operating in PTC territory.

- (a) General. Except as provided in paragraph (b) of this section, each locomotive, locomotive consist, or train on any track segment equipped with a PTC system shall be controlled by a locomotive equipped with an onboard PTC apparatus that is fully operative and functioning in accordance with the applicable PTCSP approved under this subpart.
  (b) \* \* \*

  - (2) [Reserved]

- (5) Freight yard movements. For the purpose of freight switching service or freight transfer train service, a locomotive, locomotive consist, or train may operate without onboard PTC apparatus installed or operational where an onboard PTC apparatus is otherwise required by this part only if all of the following six requirements and conditions are met:
- (i) The locomotive, locomotive consist, or train must be engaged in freight switching service or freight transfer train service, including vard, local, industrial, and hostling service, movements in connection with the assembling or disassembling of trains, and work trains:
  - (ii) The movement must originate either:
  - (A) In a vard: or
- (B) Within 20 miles of a yard with the yard as the final destination point:
- (iii) The locomotive, locomotive consist, or train shall not travel to a point in excess of 20 miles from its point of entry onto the PTC-equipped main line track;
- (iv) The speed of the locomotive, locomotive consist, or train shall not exceed restricted speed, except if:
- (A) No other locomotive, locomotive consist, or train is operating on any part of the route without an operational onboard PTC apparatus:
- (B) No working limits are established under part 214 of this chapter on any part of the route: and
- (C) Either an air brake test under part 232 of this chapter is performed, in which case the locomotive, locomotive consist, or train may proceed at a speed not to exceed 30 miles per hour; or an air brake test under

## § 236.1007

part 232 of this chapter is not performed, in which case the locomotive, locomotive consist, or train may proceed at a speed not to exceed 20 miles per hour:

- (v) The speed of the locomotive, locomotive consist, or train shall not exceed restricted speed on PTC-equipped track where the route terminates: and
- (vi) The route of the locomotive or train is protected against conflicting operations by the PTC system and sufficient operating rules to protect against train-to-train collisions, as specified in the PTCSP.
- (vii) FRA may, in its discretion, approve yard movement procedures other than the yard movement procedures in paragraphs (b)(5)(i) through (b)(5)(vi) of this section in a PTCSP or an RFA that provide an equivalent or greater level of safety as the requirements of paragraphs (b)(5)(i) through (b)(5)(vi) of this section, where such procedures are similar to those of paragraphs (b)(5)(i) through (b)(5)(vi) of this section.

(viii) A locomotive, locomotive consist, or train with an operative onboard PTC apparatus may assist a locomotive, locomotive consist, or train operating without an operative onboard PTC apparatus for purposes such as locomotive malfunction, rescue of locomotive or cars, or to add or remove power, provided that such a movement is made at restricted speed.

\* \* \* \* \* \*

- (d) Onboard PTC apparatus. (1) The onboard PTC apparatus shall be so arranged that each member of the crew assigned to perform duties in the locomotive can receive the same PTC information displayed in the same manner and execute any functions necessary to that crew member's duties. The locomotive engineer shall not be required to perform functions related to the PTC system while the train is moving that have the potential to distract the locomotive engineer from performance of other safety-critical duties
- (2) The onboard PTC apparatus may be distributed among multiple locomotives if such functionality is included with the applicable PTCSP approved under this subpart. The controlling locomotive shall be equipped with a fully operative interface that complies with paragraph (d)(1) of this section and is consistent with appendix E of this part.

## § 236.1007 Additional requirements for high-speed service.

(a) A PTC railroad that conducts a passenger operation at or greater than 60 miles per hour or a freight operation at or greater than 50 miles per hour shall have installed a PTC system including or working in concert with technology that includes all of the

- safety-critical functional attributes of a block signal system meeting the requirements of this part, including appropriate fouling circuits and broken rail detection (or equivalent safeguards).
- (b) In addition to the requirements of paragraph (a) of this section, a host railroad that conducts a freight or passenger operation at more than 90 miles per hour shall:
- (1) Have an approved PTCSP establishing that the system was designed and will be operated to meet the failsafe operation criteria described in Appendix C to this part; and
- (2) Prevent unauthorized or unintended entry onto the main line from any track not equipped with a PTC system compliant with this subpart by placement of split-point derails or equivalent means integrated into the PTC system; and
  - (3) Comply with §236.1029(c).
- (c) In addition to the requirements of paragraphs (a) and (b) of this section, a host railroad that conducts a freight or passenger operation at more than 125 miles per hour shall have an approved PTCSP accompanied by a document ("HSR-125") establishing that the system:
- (1) Will be operated at a level of safety comparable to that achieved over the 5 year period prior to the submission of the PTCSP by other train control systems that perform PTC functions required by this subpart, and which have been utilized on high-speed rail systems with similar technical and operational characteristics in the United States or in foreign service, provided that the use of foreign service, provided that the use of foreign service data must be approved by the Associate Administrator before submittal of the PTCSP; and
- (2) Has been designed to detect incursions into the right-of-way, including incidents involving motor vehicles diverting from adjacent roads and bridges, where conditions warrant.
- (d) In addition to the requirements of paragraphs (a) through (c) of this section, a host railroad that conducts a freight or passenger operation at more than 150 miles per hour, which is governed by a Rule of Particular Applicability, shall have an approved PTCSP accompanied by a HSR-125 developed